

# Overview of California Water Supplies

Near- and Long-Term  
Availability

Kamyar Guivetchi  
Department of Water Resources  
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# Preview

- Water Supplies
- Water Uses
- Water budgets -- existing
- Water budgets -- with likely options
- Other issues
  - costs of water
  - groundwater
- Recommendations

## Disposition of California's Average Annual Precipitation

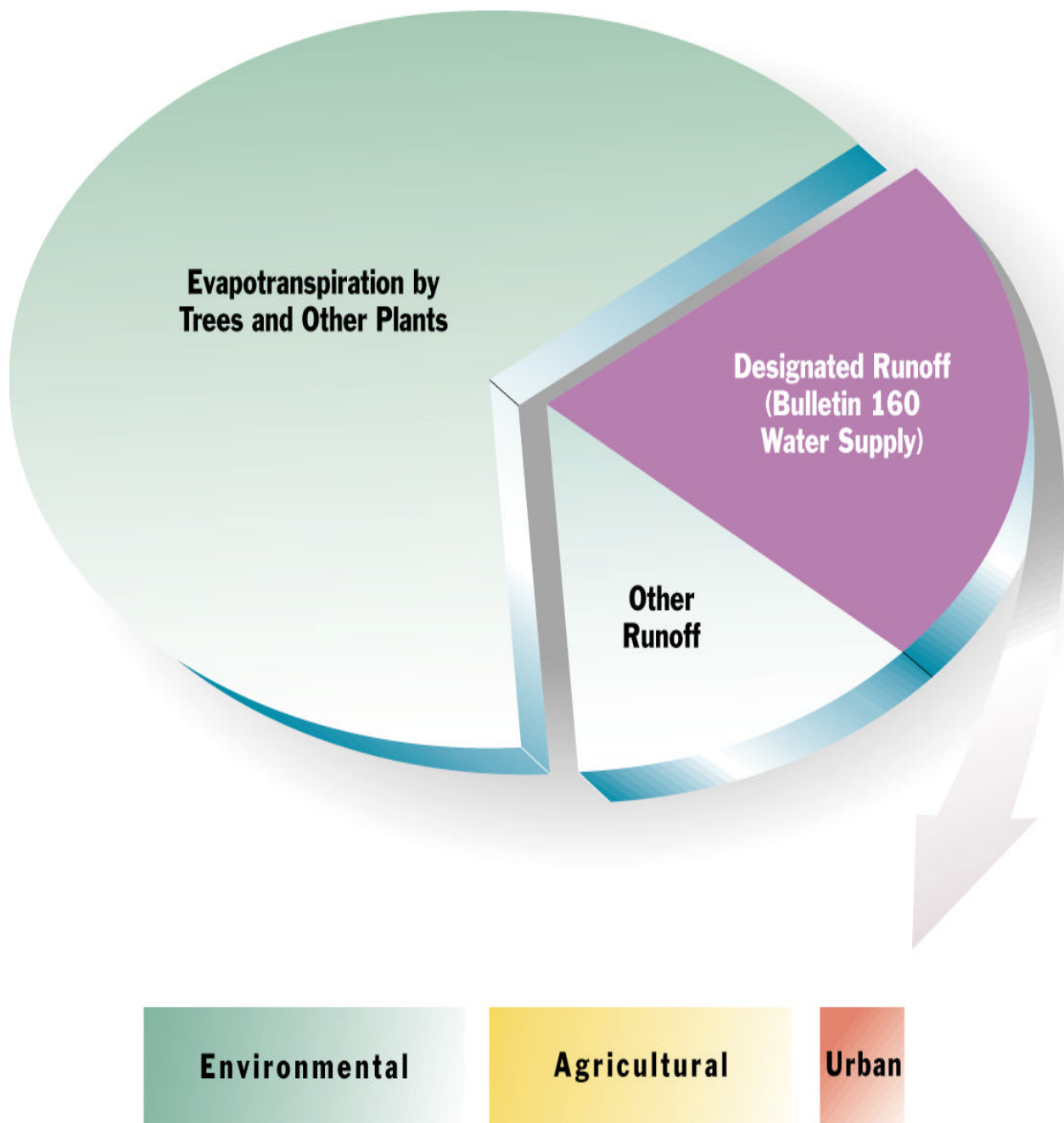


FIGURE 3-1  
Distribution of Average Annual Precipitation and Runoff

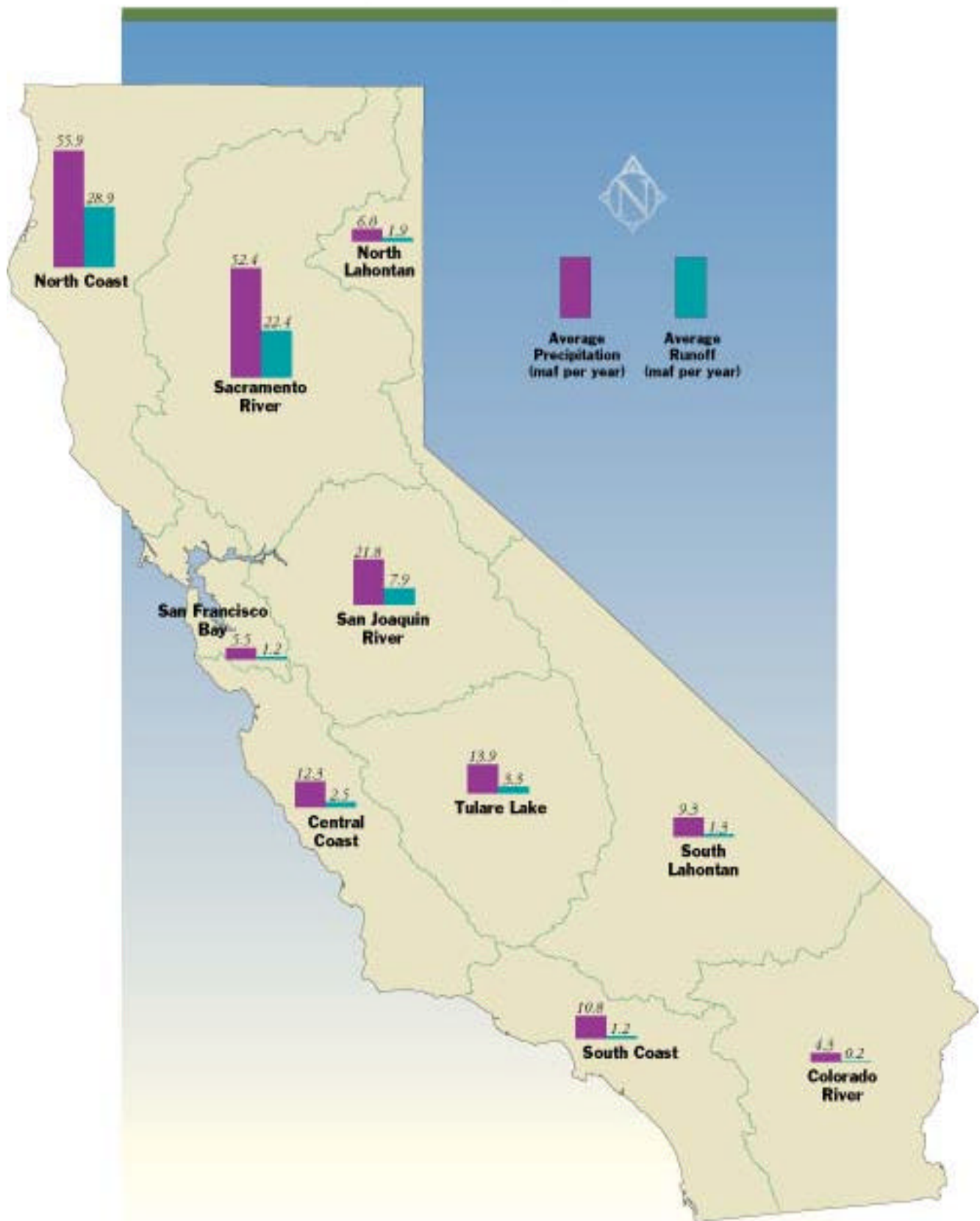
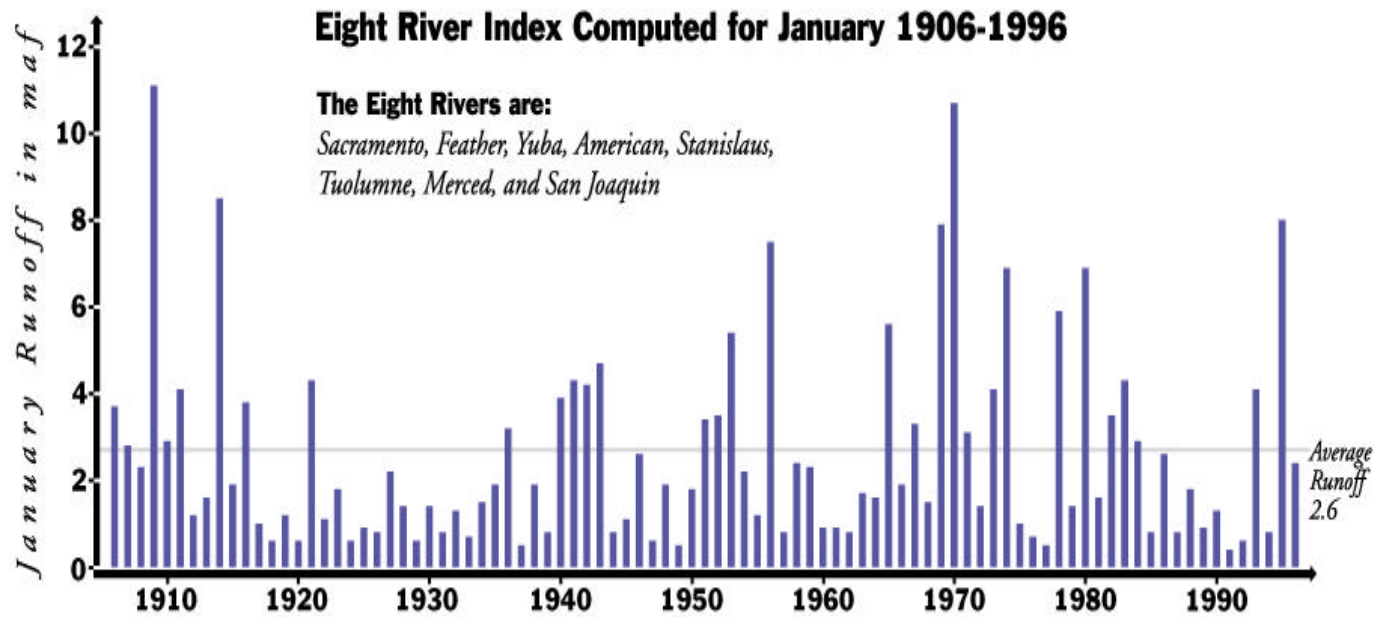


FIGURE 3-6

**Eight River Index Computed for January 1906-1996**



## 1995 Level of Development (log)



# California Average Water Supplies Existing Facilities and Programs as of 1995

		(thousand acre-feet)			
		Surface			
			Central Valley Project	7,004	
			Colorado River	5,176	
			Other Federal Projects	910	
			State Water Project	3,126	
			Local Supplies	11,054	
			Required Environmental Flow	31,372	
			Reapplied	6,441	
		Groundwater			12,493
		Recycled and Desalted			323
		Total (rounded)			77,900
		Source: Bulletin 160-98			

# California Average Water Supplies Existing Facilities and Programs as of 1995

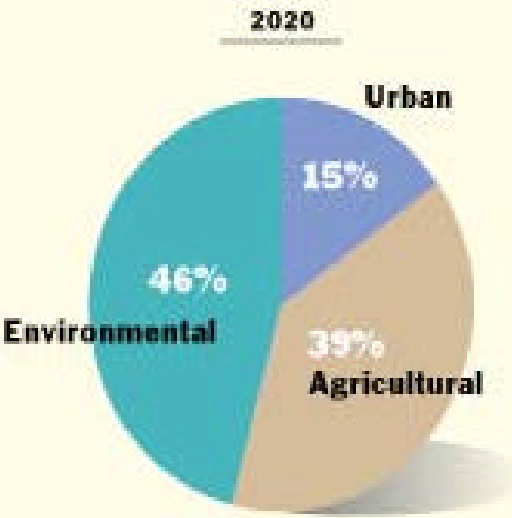
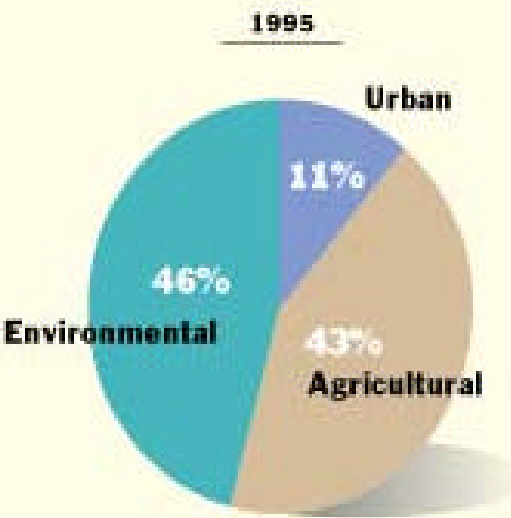
				TAF		
		North Coast		20,610		
		San Francisco Bay		7,110		
		Central Coast		1,380		
		South Coast		5,220		
		Sacramento River		14,550		
		San Joaquin River		10,760		
		Tulare Lake		12,230		
		North Lahontan		940		
		South Lahontan		590		
		Colorado River		4,510		
		<b>Total</b>		<b>77,900</b>		



**Summary of Key Statistics**

Shown below for quick reference are some key statistics presented in Chapter 4. Water use information is based on average water year conditions. The details behind the statistics are discussed later.

	<i>1995</i>	<i>2020 Forecast</i>	<i>Change</i>
Population (million)	32.1	47.5	+15.4
Irrigated crops (million acres)	9.5	9.2	-0.3
Urban water use (maf)	8.8	12.0	+3.2
Agricultural water use (maf)	33.8	31.5	-2.3
Environmental water use (maf)	36.9	37.0	+0.1

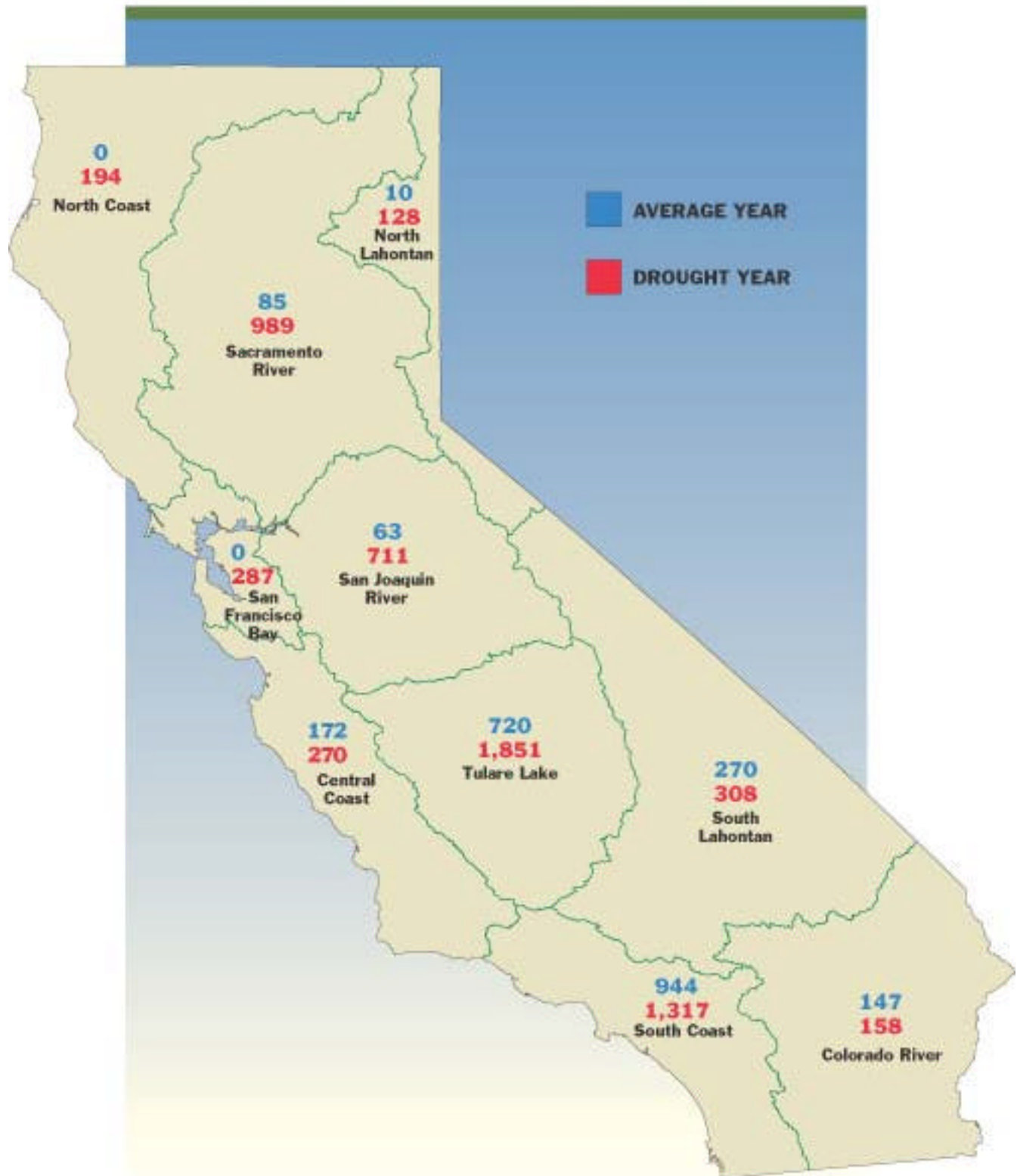


# California Water Budget with Existing Facilities and Programs

		(million acre-feet)			
			1995	2020	
	<b>Water Use</b>				
	Urban		8.8	12.0	
	Agricultural		33.8	31.5	
	Environmental		36.9	37.0	
	Total		79.5	80.5	
	<b>Supplies</b>				
	Surface Water		65.1	65.0	
	Groundwater		12.5	12.7	
	Recycled and Desalted		0.3	0.4	
	Total		77.9	78.1	
	<b>Shortage</b>		1.6	2.4	
	Source: Bulletin 160-98				

FIGURE 10-1

2020 Shortages by Hydrologic Region with Existing Facilities and Programs (taf)



# Summary of Options Likely to be Implemented by 2020

(thousand acre-feet)

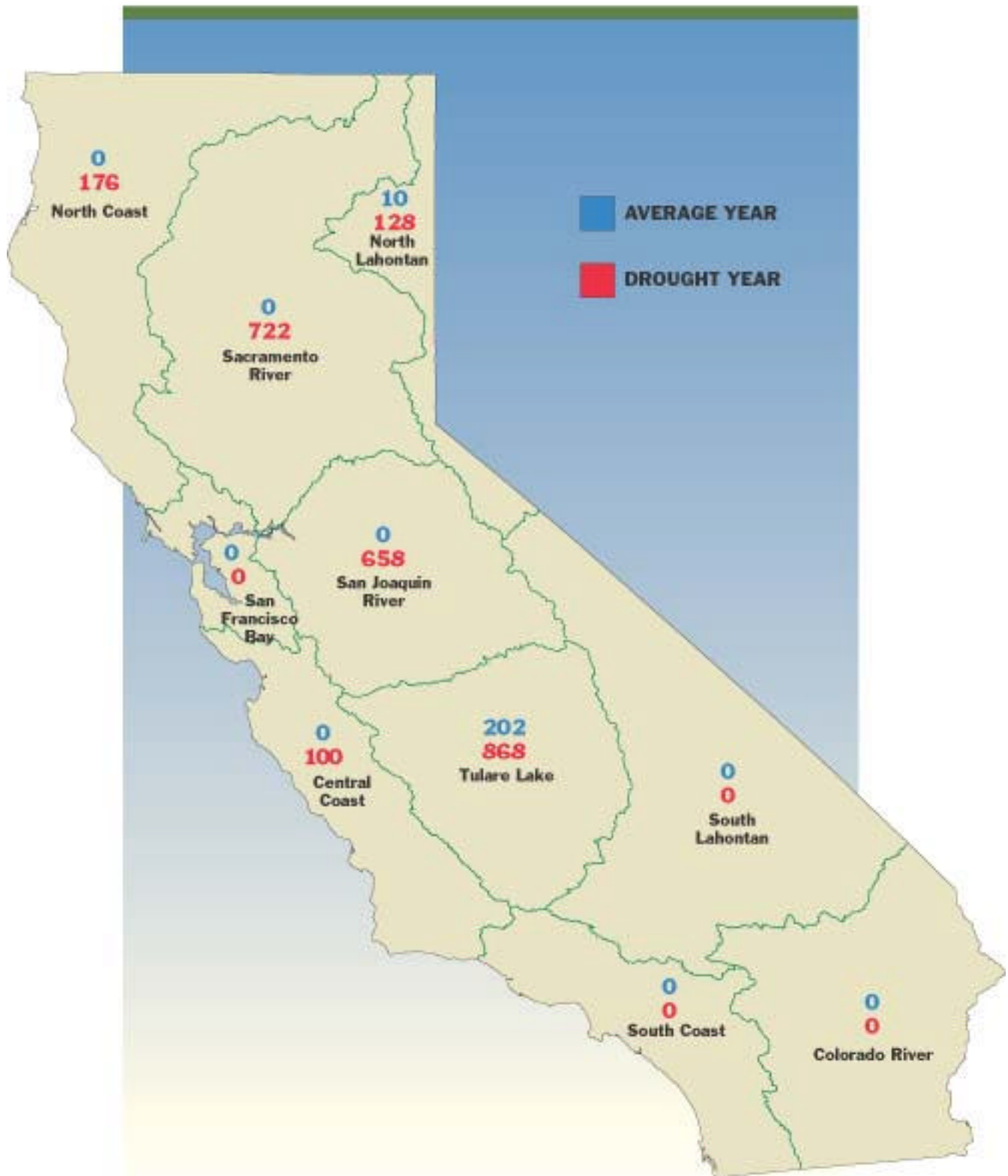
Option Type:	Yield
Local Demand Management Options	507
Local Supply Augmentation Options	
Surface Water	110
Groundwater	24
Water Marketing	67
Recycling & Desalting	423
Statewide Supply Options	
CALFED Bay-Delta Program	100
SWP Improvements	117
Water Marketing (Drought Water Bank)	--
Multipurpose Reservoir Projects	710
Expected Reapplication	141
<b>Total Options</b>	<b>2,199</b>

# California Water Budget with Options Likely to be Implemented

	(million acre-feet)			
		1995	2020	
<b>Water Use</b>				
Urban		8.8	11.8	
Agricultural		33.8	31.3	
Environmental		36.9	37.0	
Total		79.5	80.1	
<b>Supplies</b>				
Surface Water		65.1	66.4	
Groundwater		12.5	12.7	
Recycled and Desalted		0.3	0.8	
Total		77.9	79.9	
<b>Shortage</b>		1.6	0.2	
Source: Bulletin 160-98				

FIGURE 10-2

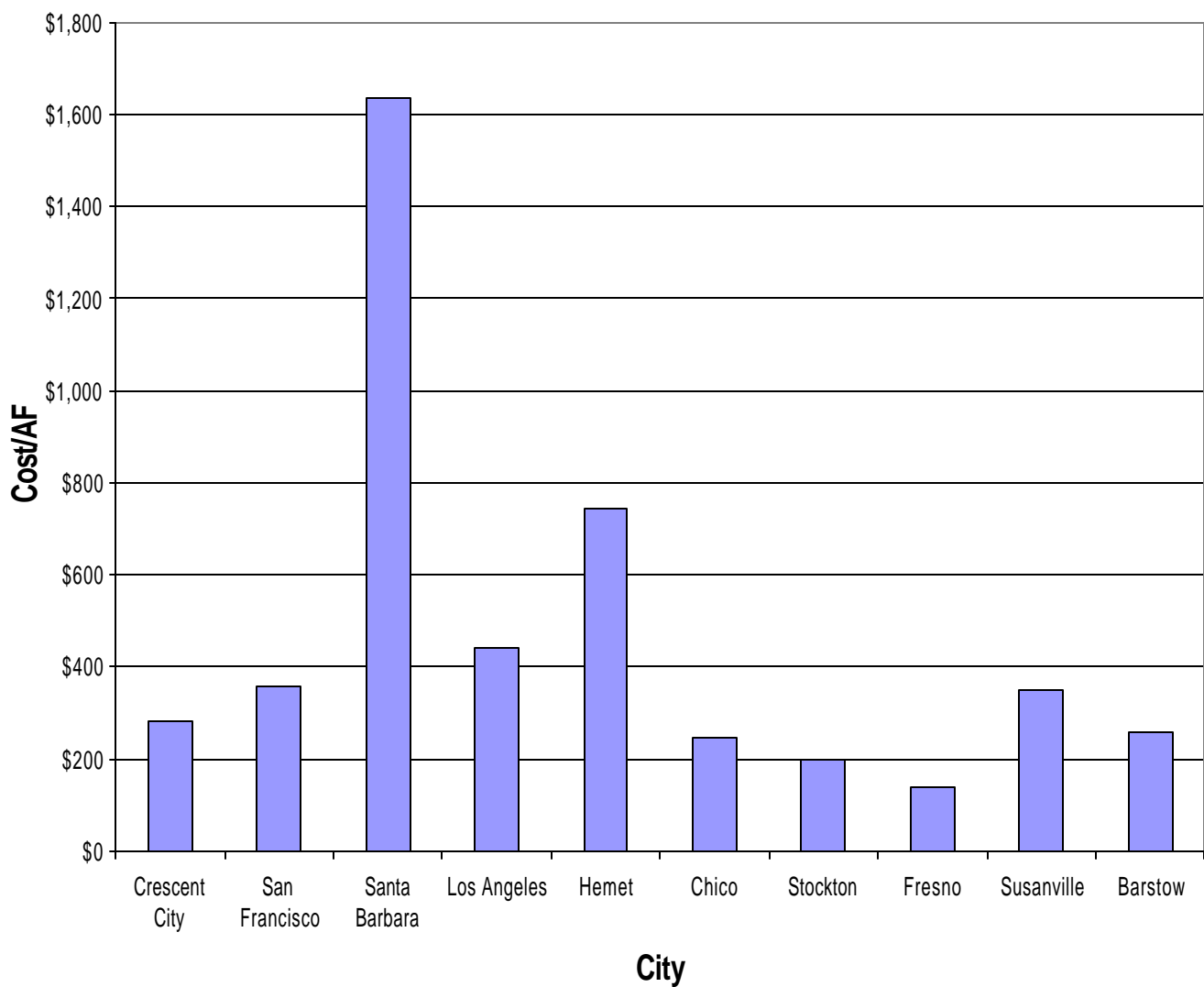
2020 Shortages by Hydrologic Region with Likely Options (taf)



# Other Issues

## Costs of Water

**Industrial Water Costs - Selected Cities**

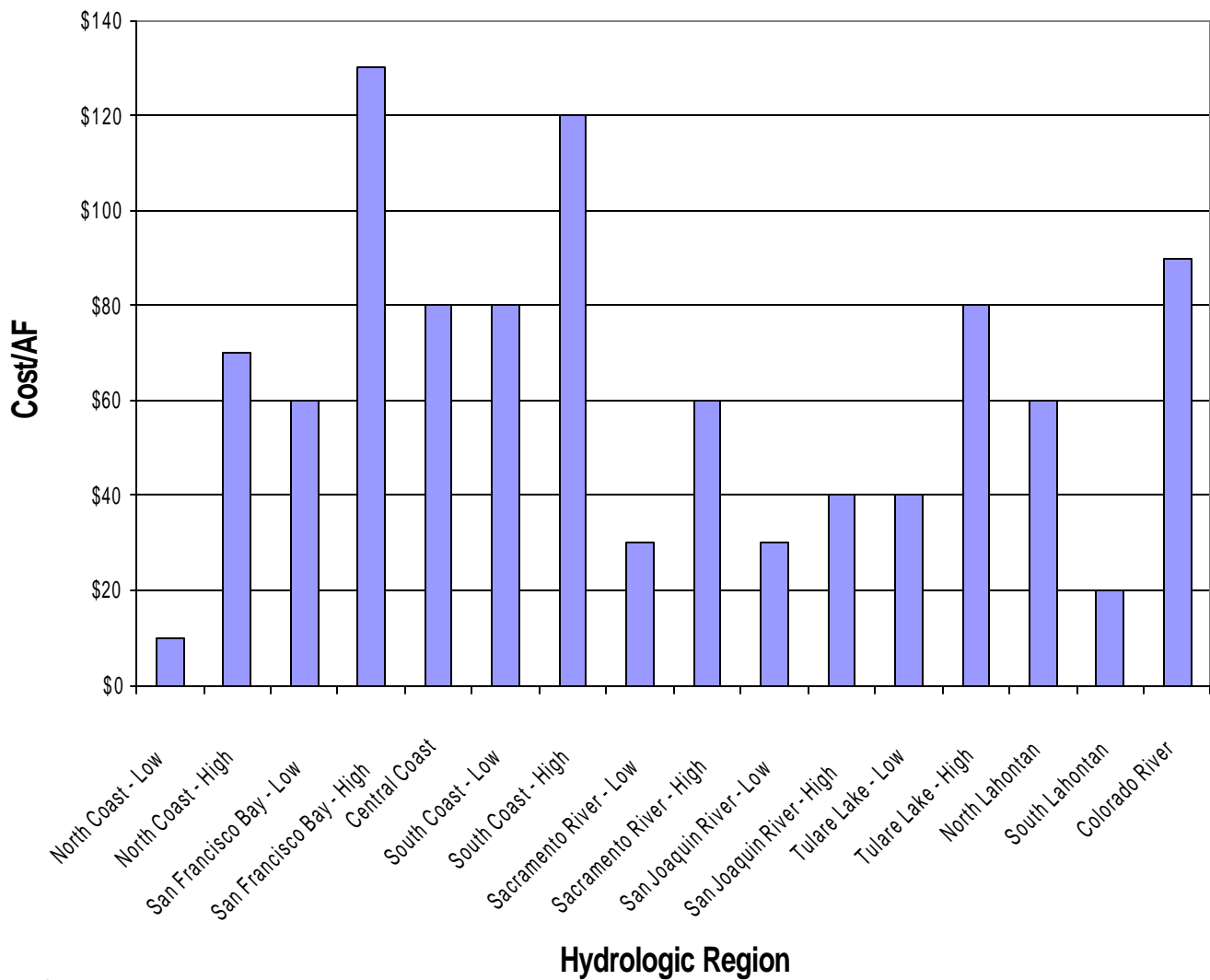


Source: Bulletin 160-93

# Other Issues

## Costs of Water

Typical Ground Water Pumping Costs



Source: Bulletin 160-93



# Other Issues

## Groundwater

Over 150 AB3030  
groundwater management  
plans adopted in California

17 counties have enacted  
groundwater management  
ordinances since 1994

Figure 3—Status of Groundwater Management in California (Updated to April 1998)



# Recommendations

- SWRCB Resolution 75-58  
minimizes fresh water for plant  
cooling and encourages  
recycling & reuse opportunities
- Need closer DWR & CEC  
collaboration on California  
Water Plan Update 2003
- Consider impact of future  
sittings on CALFED actions.
- Early coordination with local  
agencies on basin management

# Approach for Preparing Water Plan Update 2003

- Collaborative consensus-based process with broad public participation and input

- Open, Transparent and Responsive Planning Process

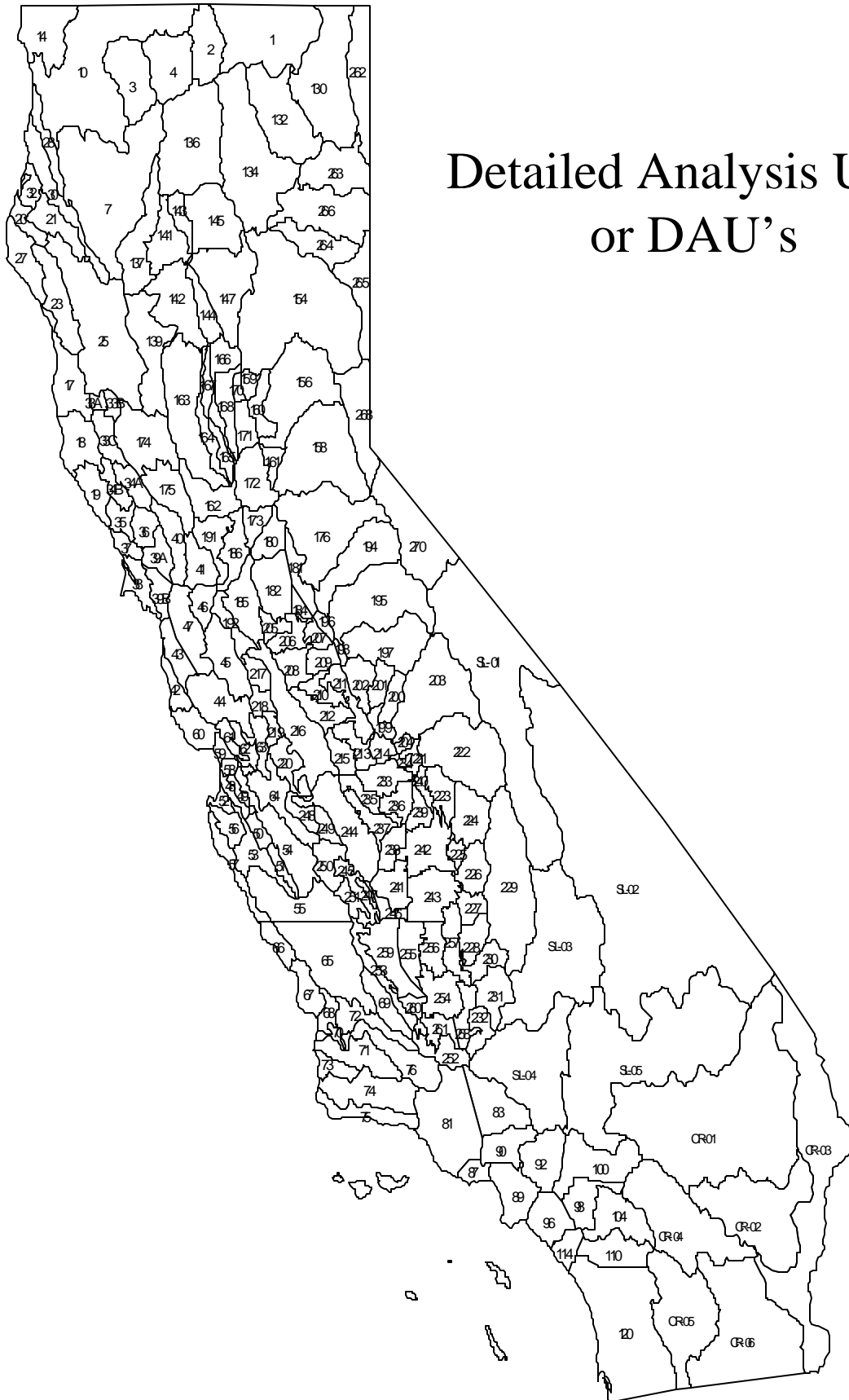
- Public Advisory Committee

- Extended Review Forum

# Water Plan Update 2003

## Process and Timetable

- Water Plan Update  
Methodology and Assumptions  
Report - *Release by Jan. 2002*
- Draft Plan Update - *Release  
early 2003*
- Public Comment & Hearings -  
*During 2003*
- Final Water Plan Update -  
*Release by the end of 2003*



## Detailed Analysis Units or DAU's